



CONFIDENTIAL REPORT
Autism Spectrum Disorder Center
Serving Kaiser Permanente families and children with Autism Spectrum Disorder

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MULTIDISCIPLINARY EVALUATION SUMMARY

Patient:	Kobi Bioco
Kaiser MRN:	110016239420
Date of Consultation:	5/6/2019
Date of Birth:	4/23/2002
Age:	17 Y
Parents:	Pamela and Neil Bioco

The family's rights, confidentiality and exceptions to confidentiality, use of automated medical record and primary care provider and behavioral health services staff access to medical record, and consent to treatment were reviewed.

Evaluation Participants

Present:

Patient, Mother, and Father

Kavitha Rao, MD, Child & Adolescent Psychiatrist (lead clinician)

Kelly J. Behrens, PsyD, Clinical Psychologist

Evaluation Procedures

Review of Patient Records

San Jose ASD Center Intake packet forms, including:

San Jose ASD Evaluation Intake Form

Social Communication Questionnaire

Achenbach Child Behavior Checklist (CBCL), Parent Report

Achenbach Child Behavior Checklist (TRF) Teacher Report

Youth Self- Report (YSR)

Clinical Interview with Parents and Patient

Assessments completed in clinic:

Wechsler Adult Intelligence Scale- Fourth Edition (WAIS- IV)

Adaptive Behavior Assessment System, Third- Edition (ABAS-III)

Autism Diagnostic Observation Schedule, Second Edition (ADOS-2), Module 4

REFERRAL QUESTION & PARENTAL CONCERNS

Kobi was referred to the Autism Spectrum Disorder Center at Kaiser Permanente San Jose Medical Center by Michelle Olson, PsyD, of Kaiser Permanente Fresno. His parents and providers are seeking diagnostic clarification, especially regarding the presence of an autism spectrum disorder (ASD), and treatment recommendations. Parents report being primarily concerned about Kobi's academic decline in high school, history of limited social engagement, and limited effectiveness of depression treatment.

BACKGROUND INFORMATION

Obtained from parent interview, parent completed forms, and review of past evaluations.

Origin of concerns

Concerns about Kobi's development have been evident since he was a toddler and had a speech delay. Of note is that his mother left the family in the Philippines to start work as a nurse in the US when Kobi was 9 months of age. His live-in nanny and maternal grandmother became his primary caretakers at that time. His father was often traveling for work. When Kobi, his older sister, and father moved to the US to join his mother (when he was age 18 months) he had difficulty with the transition. He would not allow his mother to hold him for about one year, only allowing his father to care for him. He started in a private preschool but within a month the teacher reported his behavior was not appropriate with a regular preschool; he refused to participate with peer interaction (e.g. refused to play ball) and in classroom activities. He had a speech and language evaluation prior to age 3 which indicated normal receptive language, and selective mutism, but the speech pathologist told his mother that he did not appear to have autism. He was moved to a Headstart preschool. He did fairly well academically in elementary and middle school, getting As and Bs. However, he is struggling in academic subjects in high school. He failed English in 9th, 10th and 11th grades, and will be taking summer school again to make up the credit. He does well in summer school where there is no homework.

Per visit with psychiatrist Dr. Sayadipour on 4/19/19: His mother reported that he had *"unexplained withdrawal, fear, sadness and irritability during his toddler time. He was not seeking comfort and showing no response when comfort was given. He had failure to smile, was watching others closely but not engaging in social interaction, failing to ask for support or assistance, failure to reach out when picked up, no interest in playing or other interactive games. Mother reported that was heart breaking moments for her. These symptoms appear to be consistent with reactive attachment disorder that he may have had during childhood. Mother also reported he did have some difficulty with change and continued having obsessive thoughts and ritualistic behavior. Mother reported he seems hoarding things. He continues making careless mistakes. Mother is concerned that he still he is not able to make firm friendships."*

Social Information

Kobi lives with his mother, father, and 12-year-old brother. His 20-year-old sister lives in her own apartment. The languages spoken in the home are English and Tagalog. Regarding family stressors: The family has moved six with times due to parental job changes.

Birth and Medical History

Prenatal Inform:	Mother was age 29 and father age 32 at the time of birth. There were no prenatal complications. There was no exposure to toxins.	
Birth Information:	Born on time by vaginal delivery. Birth weight was about 8lbs. There were no postnatal complications.	
Hospitalizations:	None	
Surgeries:	2005 right internal ear occlusion cyst removed	
Significant Illnesses/Injuries	Patient Active Problem List: KARYOTYPE 47, XYY, deletion of chromosome 9 SEVERE OBESITY PEDS, BMI >99 PERCENTILE OBSTRUCTIVE SLEEP APNEA NON- ADHERENCE TO CPAP/BPAP FOR SLEEP APNEA (parents and Kobi estimate that that he uses the CPAP machine approximately 4 days a week) ASTHMA LATENT TB OF LUNG ACANTHOSIS NIGRICANS ALLERGIC RHINITIS	
Seizures:	None	
Medical Studies:	Genetic testing shows XYY and deletion on chromosome 9, including part of DOCK8 gene. According to letter on 4/16/2018 by Swetha Krishnamurthy, MD, clinical geneticist, disruptions in this gene function are the associated with a known intellectual disability syndrome." XYY is associated with tall stature, large head size, low muscle tone, language delay, learning difficulties, ADHD, ASD, anxiety, Oppositional Defiant Disorder, bipolar disorder, and depression.	
Regressions:	There is no history of marked regressions in language, socialization, or other domains.	
Vision:	Wears glasses for vision correction. No parental concerns.	
Hearing:	No parental concerns.	
Medications:	Medication • bupropion (WELLBUTRIN XL) 300 mg Oral 24hr XL Tab • Fluoxetine (Prozac) 40 mg Oral Cap • Beclomethasone Dipropionate (QVAR) 80 mcg/actuation Inhl Aero	Instructions - Take 1 tablet by mouth every morning - Take 2 capsules by mouth every morning - INHALE 1 TO 2 PUFFS ORALLY 1 TO 2 TIMES A DAY FOR CONTROL OF ASTHMA OR PER ASTHMA PLAN. RINSE MOUTH WELL AFTER USE

	• Albuterol (PROVENTIL/VE NTOLIN) 90 mcg/actuation Inhaler • Montelukast (SINGULAIR) 10 mg Oral Tab INHALE 2 PUFFS PO Q4-6H PRN COUGH OR WHEEZE Take 1 tablet by mouth daily at bedtime
Allergies:	No known drug allergies. No other allergies.
Sleep:	He has difficulty initiating sleep, has sleep apnea, talks in his sleep and is tired during the day. He gets approximately 8 hours of sleep per day.
Eating:	Overweight
Gastrointestinal/Urinary	No concerns.

Complementary or Alternative Medical/Therapeutic Interventions

None.

Developmental Milestones

Kobi sat at 9 months and walked independently at 16 months. There were no other concerns about fine or gross motor skills. Growing up, Kobi displayed a speech and language delay. When his mother left him to migrate to the US (when Kobi was ages 9-18 months), he was reported by his maternal grandmother to have normal receptive language but delayed expressive language. His parents are unsure about the timing of his speech milestones but note that speech delay resolved at approximately age 6 years. His current expressive speech abilities consist of complete and full sentences. Kobi's receptive language abilities were not reported to be a concern. However, he asked that his mother give him written instructions when there are multiple steps (or he will forget them).

Educational History and Current Services:

Kobi attends the 11th grade at Buchanan High School in the Clovis Unified School District, in mainstream education. Kobi has not repeated any grades. He will need to take summer school due to failing English 11 but is otherwise on track to graduate high school.

Kobi has a 504 plan for depression and OCD. At the most recent 504 meeting on 3/18/2019, it was noted that grades in English, Math, and US History were low but improving. *"No teachers report any behavioral issues for Kobi. All teachers report that K interacts appropriately with his peers. He is insightful and has conversations with them... He is social at lunch with a group of peers... Since there are no issues of behavior reported in any class by any teacher, Mr. B reports to mom that the school would not do a behavioral analysis here as part of the assessment process. The issue boils down more to trying to discern what is causing the poor performance: Disability or Kobi's choices?"* The teachers reported that his social interactions seemed *"totally normal... A little quiet but good in peer and adult conversation/debate/class group work. Loner and art/gets into his own head with music on... Shows humor, kind hearted, supportiveness, good conversations, gets along with peers, maturity level increased. All teachers nodded their agreement that this is what they are also seeing in their classes. Respect*

to adults, as well". His mother reports that during the 504 meeting the school psychologist and teachers agreed that he does not show signs of autism spectrum disorder.

He had an Individualized Education Program (IEP) at age 3-1/2 years for (SLD)/Speech or language impairment (SLI). His mother reports that he was in a special education preschool classroom for selective mutism.

Academic services: He currently is in private tutoring 2 hours/week

Previous Evaluations Reviewed

Kobi had an "ADHD evaluation" (according to his parents) by Bradley Schuyler, PhD, neuropsychologist, at age 15. Diagnoses given were Major Depressive Disorder, Recurrent, Moderate; Sleep Apnea, Unspecified; and Mixed Obsessional Thoughts and Acts. The full evaluation report was not available for review.

A "Developmental Checklist" was filled out at age 3 by his mother as part of the Glendive Public Schools Referral. At this time his mother noted that he had mastered the following cognitive skills by age 1: *"Recognizing differences among people: Responds to strangers by crying or staring; responds to and imitates facial expressions of others; responds to very simple directions; imitates gestures and actions"*.

Between ages 1 and 2 he mastered the cognitive skills of *"imitates actions and words of adults; understands and follows simple, familiar directions; response to words or commands with appropriate action; looks at storybook pictures with an adult, naming or pointing to familiar objects on request; recognizes difference between you and me; accomplish his primary learning through own exploration"*.

At age 3 he was reported to master the following cognitive skills: *"Response to simple directions; matches and uses associated objects meaningfully; recognizes self in the mirror, saying baby, or her own name; is beginning to understand functional concepts of familiar objects and part/whole concepts; draws a somewhat recognizable picture that is meaningful to child if not to adult"*. He was noted to be delayed in the ability to *"talk briefly about what he is doing; Imitates adults actions, and asks for information; why and how questions requiring simple answers"*

His mother's main concerns at that time were that he does not he did not communicate with the *"majority of people. Limited words and hard to understand. He cannot express himself/without verbal interaction with strangers/limited vocabulary being used/words hardly understandable, causing him to shy away from people/with lots of frustrations and himself (example crying) because people cannot understand what he means"*.

BEHAVIORAL AND PSYCHIATRIC HISTORY

Psychiatric Treatment

Kobi and his parents have been seen at the Kaiser Permanente Department of Psychiatry in Fresno since 1/2018. He has been diagnosed with Major Depressive Disorder and Obsessive-Compulsive Disorder. He is treated by psychotherapist Dr. Olson, and psychiatrist Dr. Sayadipour for Major Depressive Disorder and Obsessive-Compulsive Disorder.

Psychiatric medications:

Fluoxetine, 80 mg daily for depression and OCD, with partial response. Wellbutrin XL, 300 mg daily was added in 3/2019.

Review of Psychiatric Systems:

Kobi is reported as having possible symptoms of **OCD** including obsessive thoughts and compulsive behaviors since at least middle school. His obsessional thoughts revolve around need for symmetry and need for order and (according to Kobi) sometimes interfere with paying attention in school. The compulsive behavior(s) include counting, hoarding and ordering objects but are not impairing.

Symptoms of Major Depressive Episode which cause clinically significant distress or impairment in social and academic functioning.

Depressed mood most of the day, about half the time, as indicated by either subjective report (e.g., feels empty, or hopeless) or observation made by others (e.g., appears down).

Markedly diminished interest or pleasure in most activities most of the day, about half the time (as indicated by either subjective account or observation).

Initial insomnia nearly daily

Fatigue or loss of energy nearly every day.

Feelings of worthlessness sometimes (feeling he will disappoint his parents).

Indecisiveness nearly every day (by subjective account or as observed by others) but this is a long-standing problem predating his depressed mood.

He denies suicidal ideation, plan or intent.

He reports that about once every 10 days or so, he has "an abundance of energy" when he feels euthymic, has motivation to do more work at school, initiates more social interactions at home and school (for example, goes to his brother's room to initiate a social conversation, gets to school early and interacts more with peers and teachers), and skateboards 8-10 miles. He tends to sleep better on these days.

Kobi was not reported to show symptoms or features suggestive of a psychotic disorder (e.g., hallucinatory experiences, frankly bizarre thinking) or a bipolar disorder (e.g., rapid cycles of significant mood and behavior changes without a clear trigger, associated with decreased need for sleep, increased goal directed activity and changes in energy level).

Legal Problems and/or CPS Involvement

None

Risk/Abuse Assessment

There is no history of trauma, neglect, or of sexual or physical abuse. Kobi expressed suicidal ideation once in 10th grade when his teacher confronted him about not doing his homework. The teacher started crying and ran out of the classroom. The classmates then looked at Kobi who started crying and said he'd rather be gone. However, Kobi denies actually having suicidal ideation and states he said that only because he was overwhelmed. He does not engage in dangerous behaviors. There is no history of any substance use. He has no access to firearms.

BEHAVIORAL AND DEVELOPMENTAL EVALUATIONS

Many of the scores presented below are in terms of standardized values to examine if the extent of reported behavioral and developmental issues are beyond what would be expected for Kobi's age and gender.

Social Communication Questionnaire (SCQ) - Lifetime

The SCQ is a 40-item parent-report screening measure that measures symptoms associated with autism. The SCQ is based on the Autism Diagnostic Interview-Revised, an extensive structured interview used for diagnosing autism that has much scientific support. The "Lifetime" form asks the parent to refer to the child's overall developmental history with half of the items focusing on period between the child's 4th & 5th birthdays. Although no specific cut-off scores have been established for clinical use, scores of 15 or higher are significant for children over the age of 8.

The SCQ was completed by his mother. His overall score on the SCQ was 12. This score indicates that Kobi was described as having shown a few signs of autism over his life. Specific concerns will be detailed later in report.

Achenbach Forms completed:

- Child Behavior Checklist (CBCL) - Completed by Mother
- Teacher Report Form (TRF) – Completed by Mr. Nichols, Kobi's Art 1 teacher, who knows him moderately well.
- Youth Self-Report (YSR) - Completed on 3/20/2019

The Achenbach questionnaires are used to assess behavioral problems and social competencies. Items are scored on a 3-point scale: from not true ("0") to often true ("2") of the child. The totaled raw scores are then made in standardized scores called T-scores that allow for comparisons to the norm sample for a child of the same age and gender. T-scores have an average of 50 and a standard deviation (SD) of 10. T-scores of 70 or above are two SDs above the average, suggest the presence of significant problems, and are indicated as being in the "Clinical range". T-scores of 65-69 are in the "Borderline clinical range."

Syndrome Scales	Parent	Teacher	Youth
Anxious/Depressed	60	57	54
Withdrawn/Depressed	78-C	63	68-B
Somatic Complaints	61	50	55
Social Problems	66-B	50	59
Thought Problems	74-C	57	68-B
Attention Problems	76-C	51	77-C
Rule-Breaking Behavior	52	50	51
Aggressive Behavior	64	50	56
DSM-Oriented Scales			
Depressive Problems	75-C	61	69-B
Anxiety Problems	61	54	51
Somatic Problems	60	50	56
Attention-Deficit Hyperactivity Problems	68-B	51	67-B
Oppositional Defiant Problems	58	50	51
Conduct Problems	56	50	52

B= Borderline clinical range

C=Clinical range

Achenbach Summary:

Kobi's mother reported that her main concerns are "instability and academic achievement. I believe there is a missing piece at this time. I want to help him find it, so he will not be a burden to...society and to be able to contribute something to others. If given proper help I believe he has more to offer than what I am seeing." Regarding strengths "he is a good son, he does not argue, he stays away from kids with bad influences. He is home all the time and he is naïve and very honest." His mother notes that he often stores things he does not need such as papers, food, and garbage.

Kobi's teacher reported that an art he is performing far above grade level in Art class. Mr. Nichols' concerns are that "Kobi does appear to be possibly depressed at times." Regarding strengths "Kobi is very intelligent and is an unusually talented and creative artist. Kobi is polite and thoughtful. He has a tremendous amount of potential as an artist."

Kobi reported that his main concern about school is that he has "difficulty finding motivation to complete tasks and can be easily distracted." Regarding his strengths "I try to be as honest as I can with people; I am an open book, I try not to hide things; I speak loud and well, words enunciated; I am funny (sometimes); I am tall/larger, people tell me I am like a body guard; I will protect the ones dear to me; I like looking for shortcuts (especially in math); I'm a hugger".

Adaptive Behavior Assessment System, 3rd Ed. (ABAS-3): Parent Form 5-21 years:

The ABAS-3 measures the functional skills of individuals from birth to adulthood necessary for daily living, focusing on what they do without help from others. Adaptive behavior scores measure whether an individual performs the correct behavior or skill when it is needed. These scales assess what a person actually does as opposed to what he or she is capable of doing. The ABAS-3 covers adaptive behaviors in three different domains: Conceptual (communication and academic skills), Social (interpersonal and social competence skills), and Practical (independent living and daily living skills). A General Adaptive Composite (GAC) score is provided that summarizes the child's performance across all of these domains.

Interpretation: *The standard scores reported have a mean of 100 and a standard deviation (SD) of 15, thus allowing direct comparisons to "IQ"-type standard scores on common intelligence tests. Scores below 70 suggest significant deficits on that domain.*

Composite	Standard Score	Percentile Rank	95% Confidence Interval	Qualitative Range
GAC*	98	45	95-101	Average
Conceptual	99	47	95-103	Average
Social	83	13	78-88	Below Average
Practical	112	79	108 2/1/2016	Above Average

**Interpret with caution due to significant discrepancies between composites.*

Raw Score to Scaled Score: Scores on each subdomain are listed on the table below. Scaled Scores have a mean of 10 and an SD of 3. Scores between 8 and 12 are considered average and scores of 3 or less indicate significant deficits.

Skill Areas	Scaled Scores	Qualitative Range
Communication	9	Average
Community Use	13	Above Average
Functional Academics	13	Above Average
Home Living	12	Above Average
Health and Safety	12	Above Average
Leisure	5	Low
Self-Care	11	Average
Self-Direction	9	Average
Social	7	Below Average

Conceptual Domain

- Communication: conversational skills, answering complex questions, nonverbal communication
- Functional Academics: measuring, writing notes/letters, using calendars & menus, money skills
- Self-Direction: task completion, making good choices, resisting impulses, planning ahead

Social Domain

- Social: having friends, assisting and doing kind things for others, showing manners
- Leisure planning ahead for, initiating, and participation in activities with others

Practical Domain

- Community Use: going places by one's self, knowing about and accessing public places/services
- Home Living: doing chores, cleaning up after oneself, meal preparation, using appliances
- Health and Safety: following safety rules, using medications, requesting help when sick or hurt
- Self-Care: hygiene, bathing, dressing, using eating utensils

ABAS-3 Summary: According to parent report, Kobi displays deficits in a few adaptive behaviors, most notably in the domain associated with planning for and participating in activities with others. Strengths are in his academic skills, ability to do chores at home, following safety rules, and ease of displaying appropriate behaviors in the community.

Wechsler Adult Intelligence Scale, 4th. Ed. (WAIS-IV):

The WAIS-IV is a comprehensive test instrument used to assess the general intellectual abilities of adults ages 16 to 90 years of age. Dr. Behrens administered the WAIS-IV to Kobi.

Behavior Observations and Validity Statement:

Kobi is a pleasant, right-handed 17-year-old male. He is a tall and large young man. He was casually dressed with fair grooming. Kobi's affect was flat with a neutral to depressed mood. He demonstrated excellent focus and attention and he appeared to give his best efforts. The WAIS-IV was administered in a standardized fashion. The test

results are likely a valid and reliable estimated of his level of intellectual functioning at the time of testing.

Results

The table below contains the results of the Index/Composite scores. These scores have an average of 100 and a standard deviation (SD) of 15, with scores between 90 and 110 considered to be within the average range. Note that an Index/Composite score should be interpreted with caution if there are large differences between the subtest scores that comprise it.

Composite Scores Summary

Scale	Composite Score	Percentile Rank	95% Confidence Interval	Qualitative Description
Verbal Comprehension (VCI)	118	88	112-123	High Average
Perceptual Reasoning (PRI)	125	95	118-130	Superior
Working Memory (WMI)*	105	63	98-111	Average
Processing Speed (PSI)	89	23	82-98	Low Average
Full Scale (FSIQ)*	114	82	110-118	High Average
General Ability Index (GAI)**	125	95	119-129	Superior

**The GAI is an optional composite summary score that is less sensitive to the influence of working memory and processing speed. However, because they are vital to a comprehensive evaluation of cognitive ability, it should be noted that the GAI does not have the breadth of construct coverage as the FSIQ score

Score Caveats

*The indicated composite score(s) should be interpreted with caution due to the significant discrepancies between the scales that comprise each score.

Subtest Scores

The tables below contain the results of the subtest scores. These scores have an average of 10 and a standard deviation of 3. Subtest scores of 8-12 are considered within the average range.

Verbal Comprehension Subtest Score Summary

Subtest	Scaled Score	Percentile Rank
Similarities	14	91
Vocabulary	13	84
Information	13	84

Perceptual Reasoning Subtest Score Summary

Subtests	Scaled Score	Percentile Rank
Block Design	15	95
Visual Puzzles	12	75
Matrix Reasoning	16	98

Working Memory Subtest Score Summary

Subtests	Scaled Score	Percentile Rank
Digit Span	9	37
Arithmetic	13	84

Processing Speed Subtest Scores Summary

Subtests	Scaled Score	Percentile Rank
Coding (CD)	9	37
Symbol Search (SS)	7	16

WISC-V Summary:

The following were among the key observations and conclusions drawn from Kobi's performance:

Verbal general statements

Kobi's performance on the verbal subtests suggests that his level of conceptual and factual knowledge, as well as his ability to verbally communicate that knowledge, is highly developed compared to others his age.

Nonverbal general statements

Kobi's nonverbally-based cognitive/reasoning and problem-solving abilities appear highly developed compared to others his age. He performed in the superior range on those subtests which required him to exercise reasoning and concept formation to complete a sequential pattern or puzzle, an area of relative strength.

Working Memory and Processing Speed

Kobi's performance on the Working Memory subtests indicates that his executive functioning memory abilities (i.e., those cognitive functions needed to sustain and shift attention, perform tasks efficiently, hold information in memory, etc.) are lower (albeit in the average range) compared to his overall level of intellectual functioning. He performed in the average range on both of the working memory subtests. However, Kobi demonstrated more difficulty on the Processing Speed subtest that required him to scan information quickly and provide a motor output (relative challenge).

Autism Diagnostic Observation Schedule, 2nd Ed. (ADOS-2)

The observation was performed by Dr. Kelly Behrens using the Autism Diagnostic Observation Schedule (ADOS-2). The ADOS-2 is a semi-structured, standardized assessment of communication, social interaction, and play or imaginative use of materials for individuals who have been referred because of possible autism or other pervasive developmental disorders. Administration consists of a series of planned social occasions or "presses" in which a behavior of a particular type is likely to occur. Across the session the examiner presents numerous opportunities for the individual being assessed to exhibit behaviors of interest in the diagnosis process. One of four modules is selected based primarily on the person's expressive language abilities:

Module 4 was selected as Kobi is a verbally fluent, older adolescent. Dr. Rao and his parents observed from behind the one-way mirror.

ADOS-2 items are rated using scores that range from 0 (behavior or deficit was not evident) through 2 or 3 (behavior or deficit was definitely present). Based on updated research showing improved psychometrics (i.e., diagnostic sensitivity), an 11-item Communication and Social Interactions Algorithm is applied to determine whether an individual falls into the "autism," "autism spectrum," or "non-spectrum" category. These refer only to ADOS-2 classifications and not overall clinical diagnosis. Although the results of, and observations from, the ADOS-2 provide very important information, they should be considered in the context of other clinical information. The ADOS-2 by itself does not rule in or out a diagnosis of an autism spectrum disorder.

Results: During the ADOS-2, Kobi displayed some behaviors consistent with an autism spectrum disorder. The Communication and Social Interactions Algorithm resulted in falling one point below the autism spectrum cut-off (CCS score of 7).

Behaviors & Observations during the ADOS-2:

Language & Communication:

Kobi spoke in fluent sentences. His voice was clearly abnormal for being monotone. He did not engage in echolalia. His speech was clearly formal for his age (e.g. "pure nihilistic comedy"). He spontaneously offered information about his interests and experiences. However, he never asked the examiner questions, even when probed. He was able to report on routine and non-routine events (e.g. trip to the Philippines). His speech included some elaboration for the examiner's benefit, although his reciprocal conversational skills were limited in flexibility and rather one-sided. He utilized some spontaneous conventional and instrumental gestures, but no emphatic gestures.

Reciprocal Social Interaction:

Kobi's eye contact was poorly regulated for social means, which slightly improved with his comfort level. His affect was flat, and he did not show or direct a range of cognitive or affective states. He showed some pleasure in the interactions.

Kobi was able to effectively communicate his feeling states, such as what makes him feel happy, anxious, scared, and angry. Furthermore, he demonstrated well-developed insight into typical social relationships, such as what makes someone a friend, and why someone may want to get married. In addition, he demonstrated insight into his own role in relationships, such as being annoying to others. He demonstrated empathy for others, such as his peers feeling lonely and getting teased. Kobi reported having friends at school but has no desire to socialize with them after school or on the weekends. He would like to have a girlfriend and get married someday.

Kobi demonstrated some responsibility for himself, such as going to school and selling items online to make money. However, his insight was limited for his age, as he has no idea what he wants to do for a career when he graduates high school. However, he does not know that he likely needs to go to college.

Kobi effectively used verbal and nonverbal means to make clear social overtures, although he made rare to occasional attempts to gain the examiner's attention. He showed a responsiveness to most social situations, which was somewhat limited. He engaged in some reciprocal social communication. Overall, the rapport was fairly comfortable, but not sustained (e.g. somewhat stilted).

Stereotyped Behaviors & Restricted Interests:

Kobi did not engage in sensory behaviors or hand/body mannerisms. He made no attempts to harm self. He did not talk about highly specific or unusual topics. He did not engage in compulsions or rituals.

Other Behaviors:

Kobi was not negative or aggressive, nor did he appear anxious.

ASSESSMENT OF AUTISM SPECTRUM DISORDER SYMPTOMS

Children with ASD share a unique set of developmental and behavioral characteristics. In particular, they have with A) persistent deficits in social communication and social interaction, and B) restricted, repetitive patterns of behavior, interests, or activities. The pattern of symptoms as they relate to these areas is described below and is summarized in the Impressions section of this report.

A. Social Communication and Social Interaction**1. Social-Emotional Reciprocity**

A core symptom of ASDs is a deficit in social or emotional reciprocity. Deficits can range from abnormalities or deficits in social approaches and social responsiveness, failures in back-and-forth conversation, and reduced sharing of interests, emotions, or affect.

The following are reported and/or observed descriptions of Kobi's social-emotional reciprocity (the ability to engage with others and share his thoughts and feelings):

Kobi was determined to have marked impairment in sharing his excitement with others.

- When younger he rarely showed or brought objects to his parents for the purpose of sharing his enjoyment or interests (i.e., not just to request help).
- He rarely draws his parents' attention to his achievements (e.g., an art project). When his parents happen to see it and show excitement he still does not express satisfaction.
- He sometimes enjoys talking about his favorite topics (e.g., video games) with others. When younger his parents recall that he and his sister would have conversations about topics of interest such as Sponge Bob.
- He was reported to demonstrate imitation skills as a toddler and preschooler, as noted by the developmental questionnaire filled out by his mother when he was age 3 years (see above). His parents recall in middle school, when in the car with his family, he engaged in an interactive rapping games. As a preschooler, he played with his sister in interactive and imitative games.
- He often seems aloof, especially at home but also, according to his parents, sometimes at school when he prefers to sit with his ear buds on. His parents report he prefers solitary activities.
- He attended many birthday and family friend parties in elementary school and engaged appropriately in the play activities (mostly physical play or video games).
- According to his parents, he demonstrates empathy infrequently. He does not usually express emotional comfort with words or actions. However, they recall he has shown consideration of his brother's needs. For example, when his mother threatened to shut down the internet for both Kobi and his brother because Kobi was not doing his homework, Kobi asked her to not punish his brother for his (Kobi's) misbehavior. He also told his parents that he avoided criticizing a teacher (when she confronted him about his lack of work) in order to avoid hurting her feelings.

- He demonstrates an ability for perspective taking, processing, and spontaneously responding to social cues. For example, if he and friends are teasing a peer, he knows when to stop to avoid really upsetting the peer.
- When others are sad, hurt, or ill, his parents observed that Kobi is often passive. However, his PE teacher told his parents that he is helpful to others in class, though details were not provided.
- The quality of reciprocal interaction is fair according to his parents. Due to his passivity he demonstrates difficulty joining into conversations. Kobi reports that shyness and social anxiety interfere with initiating conversations sometimes.
- He is able to talk about a variety of topics, and not just his specific interests.
- He displays conversational difficulties such as providing extensive details when answering. If interrupted, he sometimes starts over the narrative.
- During the ADOS-2 administration he offered relevant information often but did not ask any questions of the examiner. Kobi reports that social anxiety impairs his full engagement in conversation.

Nonverbal Communicative Behaviors

Difficulties in this area can range from poorly integrated verbal and nonverbal communication, limited or abnormalities in eye contact, gestures, facial expressions and body postures, and deficits in the detection and understanding of other's nonverbal communication.

The following are reported and/or observed descriptions of Kobi's nonverbal behaviors:

- Kobi has appropriate eye contact when interacting with his siblings. But with his parents and other adults with he rarely makes appropriate eye contact. His parents report that this may be culturally sanctioned, as making extended eye contact with elders can be a sign of disrespect. However, his eye contact is less consistent than that of his siblings.
- He shows flat facial expressions that are limited to emotional extremes unless (rarely) when angry or happy about something; he does not typically show more subtle emotions (e.g., embarrassment, confusion, guilt).
- He rarely directs his facial expressions toward others in an attempt to communicate his feelings.
- The range of gestures used when speaking is limited (e.g., not using a range of both expressive or emphatic gestures when communicating). He generally uses gestures only when prompted. During the ADOS-2 administration he showed infrequent descriptive gestures.
- He demonstrates a poorly-developed reciprocal social smile.

2. Developing, Maintaining, and Understanding Relationships

Difficulties in this area can include adjusting behavior to fit the social context, (for young children) deficits in sharing imaginative play and making friends, and showing little interest in maintaining establish or forming new peer relationships

The following are reported and/or observed descriptions of Kobi's ability to develop maintain and understand relationships:

Peer relations:

- Kobi demonstrates a reduced quality (i.e., appropriateness given age and verbal abilities) of social overtures with peers.

- He is overly passive; mostly waits for others to initiate. However, when peers approach, he responds in a way that is appropriate and that keeps the interaction going.
- He demonstrates a preference for solitary activities at home but much less so at school.
- He does not make requests/efforts to see friends outside of school.
- Despite showing social interest, he has difficulties developing and maintaining relationships appropriate to developmental level and that Kobi does not initiate social interactions with peers outside of school. While Kobi readily admits that he is not as social as the average person of his age, he reports that with friends he enjoys conversing, joking, and laughing. He also reports that his depressed mood and energy adversely impact his desire to socialize.
- During the ADOS-2 administration he expressed age-appropriate insight into friendships and his own role. He also expressed self-awareness during other parts of the evaluation.

The following are reported descriptions of Kobi's social interest and peer relationships:

- He does not have any close friendships but interacts frequently with classmates.
- He and his teachers report that he is appropriately interactive at school though he also likes to be solitary.
- When he was in daycare as a toddler with his sister, he would simply stand in one place for hours, and not interact with others nor play by himself. His parents thus removed him from daycare.

The following are descriptions of Kobi's social imitation and pretend play:

- He spontaneously joined in or copied the actions in social games, such as peek-a-boo or catch.
- According to his parents he sometimes followed the play actions (e.g., dressing up in a cape, or pretending he was flying by jumping on the chair or bed) of his siblings or peers. They recall he would follow along with his sister's directions but did not interact much with other peers. However, Colby recalls that in elementary school he and his friends frequently engaged in joint interactive pretend play (i.e., acting out an idea together, such as each assuming the persona of characters from video games).
- He engages in creative activities (is described as an excellent student in his art class). He played creatively with Legos when younger.

B. Restricted, Repetitive Patterns of Behavior, Interests, or Activities

1. Stereotyped or repetitive motor movements, use of objects or speech

Speech stereotypes

- Talking with a tone of voice or in a way that is unusual (e.g., monotonic.).
- Using overly formal phrases such as (when discussing his future) being "self-employed or a vendor", and "an apartment will suffice"

Motor stereotypes

- None

Repetitive or stereotyped use of objects

- Collecting objects that have no functional purpose, such as pieces of metal, garbage, an expired box of cookies, sticks, and receipts. His mother has to throw out garbage from his room when he is not there.

2. Excessive adherence to routines or resistance to changes, ritualized patterns of verbal or nonverbal behavior

- When younger he had rigidity around food: he was particular about food not touching on his plate to avoid mixing flavors.
- He is insistent that physical space is the same. For example, when a young child he needed to have the spoon and fork in very precise places on the table, that closet doors had to be in a particular position "or he would cry", and his chair position at the dinner table had to be adjusted multiple times for him to feel comfortable.
- He needs a lot of warning for transitions, such as doctor's visit, visiting a family event, or going on errands or outings. If his mother doesn't warn him by texting him and putting it into the calendar, he protests, but he still goes.
- He takes a long time to do homework as he wants it to be perfect.
- He has difficulty transitioning to new clothing. When in preschool he had to wear the same t-shirt daily. Even after he had outgrown it, he would wear it underneath his clothes. In high school his mother had to buy him 10 of the same t-shirts because he did not want to vary the shirts he wore.

3. Highly restricted, fixated interests that are abnormal in intensity or focus

- Possible: When younger he would watch the same video over and over in the same day (for example, an alphabet video) even though he had mastered the content already. However, this may have been related to his speech and language problems.

4. Hyper-or hypo-reactivity to sensory input or unusual interest in sensory aspects of environment**Sensory-seeking behaviors/interests**

- None

Sensory-sensitivities and oddities

- None

IMPRESSIONS

Kobi Bioco is a 17 Y male Filipino American who was referred to the Autism Spectrum Disorder Center at Kaiser Permanente San Jose for an evaluation of a suspected Autism Spectrum Disorder (ASD) by his psychotherapist Michelle Olson, PsyD of Kaiser Permanente Fresno. He has a chromosomal abnormality of XYY and a deletion on chromosome 9. He has an early history of speech delay, and selective mutism (addressed with a special education preschool) precipitated by changes in primary caretakers and a move to the US. In high school he developed Major Depressive Disorder, currently treated with fluoxetine and bupropion XL. His parents and providers are seeking diagnostic clarification, especially regarding the presence of an autism spectrum disorder (ASD), and treatment recommendations. Parents report being primarily concerned about Kobi's academic decline in high school, history of limited social engagement, and limited effectiveness of depression treatment thus far.

The evaluation was complicated by the fact that many of the observed behaviors reported to be present at home by his parents are not reported at school by his teachers (who report good peer interactions), nor by Kobi who appears to have an age-appropriate degree of self-awareness.

Based on a review of records, behavioral observations, history, and testing, it was determined that Kobi **DOES NOT meet DSM- 5 criteria for a diagnosis of Autism Spectrum Disorder**. While his desire for social engagement and development of relationships is less than age-appropriate, and he demonstrates mild deficits in social-emotional reciprocity, the degree does not appear to be commensurate with Autism Spectrum Disorder. Unlike children with ASD, Kobi has demonstrated desires to interact with his peers at school and shows adequate social interaction. He does not demonstrate the social-cognitive deficits or pervasive "all encompassing" social impairments of a child with an Autism Spectrum Disorder. For example, he demonstrates an understanding of the perspective of others in a number of social interactions with family members, peers, and teachers. Unlike children with autism, while passive, he adequately engaged in social interactions with peers growing up. His social isolation increased with the onset of his depression in middle school. He reports that on days when his mood and energy are better he is significantly more interested in initiating social interactions and making friendships. Additionally, Kobi does not present with pervasive, current or past, symptoms of repetitive or stereotyped speech, behaviors or interests.

Although Kobi does not meet criteria for an ASD, he may still be considered as having a neuro-developmental condition, **Other Specified Neurodevelopmental Disorder**, that is likely related to his chromosomal abnormality. Children and adults with non-ASD neurodevelopmental disorders often present with some autism-like traits, such as difficulty with nonverbal communication, cognitive rigidities, such as wanting predictability in schedules and routines, and insistence on sameness. His cognitive rigidities can be misinterpreted as, or greatly overlap with, Obsessive-Compulsive Disorder. He does not appear to meet criteria for OCD currently.

Kobi's social engagement has been hampered by his depression and sleep apnea, both of which impair sleep, and are only partially treated currently.

His cognitive testing today shows overall superior general ability but significant discrepancy in subtest scores that may contribute to a learning disability.

Kobi also has numerous strengths such as his calm and sweet demeanor, strong intellectual ability, artistic skill, improving social skills over time, and a strong attachment with his supportive family, who is engaged in his well-being and who advocate for his needs. Such strengths, combined with educational and social support, are promising for his development. It is also recommended that he receive an IEP evaluation through his school district in order to consider a learning disability diagnosis. Please see specific recommendations below.

DIAGNOSIS:

315.8 (F88) Other Specified Neurodevelopmental Disorder

296.25 (F 23.4) Major Depressive Disorder, Single Episode, in Partial Remission

RECOMMENDATIONS

Psychiatry

Family was recommended to work with his current psychotherapist Dr. Olson and psychiatrist Dr. Sayadipour. Recommended to parents a consideration of group psychotherapy to address depressive and social anxiety symptoms, which will also allow additional observation of Coby for diagnostic and monitoring purposes.

Education

Kobi's parents are recommended to contact their local school district and share the results of this evaluation with them. It is recommended that Kobi be evaluated for possible learning disorder given his relatively low processing speed. It is suggested that his parents and educational providers collaboratively decide what type of educational supports would be appropriate for Kobi.

Follow-up Plan

Kobi and his parents should continue to work closely with his current providers. While no specific follow-up is indicated in this clinic at this time, Kobi's parents were informed that they could contact the ASD center should any questions or concerns arise.

Thank you for the opportunity to provide consultation for Kobi. If additional consultation is indicated, please contact our team directly at the Kaiser Permanente ASD Center at (408) 360-2350.



Kavitha Rao, M.D.

Child and Adolescent Psychiatrist



Kelly J. Behrens, PsyD

Clinical Psychologist

PSY #23091



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Autism Spectrum Disorder Center

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6620 Via Del Oro, San Jose, CA 95119 ♦ (408)360-2350 ♦ (408)360-2396 Fax

May 13, 2019

Dear Parent(s),

Please find enclosed a copy of your child's ASD Evaluation Summary Report for your records. Please take your time to carefully read this report. After you have read it, you may want to share copies with those involved in your child's care (your child's teachers, therapists or clinicians).

If you have any questions about the report, please do not hesitate to call our clinic and speak to the clinician who evaluated your child.

Thank you.

Autism Spectrum Disorder Center
Kaiser Permanente San Jose Medical Center